

Claims

5 1. A linear amplifier comprising an input terminal and an analogue switch, with a switch input connected to the input terminal and a switch output connected to the switch input to provide negative feedback.

10 2. A linear amplifier according to claim 1 wherein the switch output is connected to an output terminal.

15 3. A linear amplifier according to any preceding claim, wherein the switch is connected to a supply voltage.

4. A linear amplifier according to any preceding claim, wherein the switch input is connected to the input terminal via a first resistance.

15 5. A linear amplifier according to claim 4, wherein the switch output is connected to the input terminal via a second resistance.

20 6. A linear amplifier according to claim 5, wherein a closed loop gain of the amplifier is determined from the ratio of the second and first resistances.

7. A linear amplifier according to any preceding claim, in which the analogue switch is configured to operate at temperatures of at least 200°C.

25 8. A linear amplifier as herein described as shown in Figure 1.

9. A Schmitt trigger comprising an input terminal and an analogue switch, with a switch input connected to the input terminal and a switch output connected to the switch input to provide positive feedback.

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10. A Schmitt trigger according to claim 9, wherein the switch output is connected to an output terminal.

5 11. A Schmitt trigger according to any of claims 9 or 10, wherein the switch is connected to a supply voltage.

12. A Schmitt trigger according to any of claims 9 to 11, wherein the switch input is connected to the input terminal via a first resistance.

10 13. A Schmitt trigger according to claim 12, wherein the switch output is connected to the switch input via a second resistance.

14. A Schmitt trigger according to any of claims 9 to 13, in which the analogue switch is configured to operate at temperatures of at least 200°C.

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15. A Schmitt trigger as hereinbefore described as shown in Figure 3.